Listing of Claims:

1. (Currently amended) An in vitro method of activating protein kinase B comprising

(a) obtaining from an insulin-responsive cell a membrane fraction, which comprises PDK2 ("phosphoinositide-dependent kinase 2") activity, and a cytoplasmic fraction, which comprises PDK1 ("phosphoinositide-dependent kinase 1") activity and which comprises a protein kinase B,

(b) preparing an assay mixture comprising ~~combining~~ the membrane fraction, the cytoplasmic fraction and ATP in a buffer comprising less than 145 mM chloride,

(c) optionally adding a phosphatidylinositol phosphate compound to the assay mixture,

wherein ~~(c)~~ the protein kinase B is activated in the assay mixture by virtue of having a threonine residue phosphorylated and a serine residue phosphorylated, such that ~~(d)~~ the activated protein kinase B is capable of phosphorylating a GSK3 ("glucose synthase kinase-3").

2. (Original) The method of claim 1 wherein the insulin-responsive cell is treated with insulin.

3. (Original) The method of claim 2 wherein the membrane fraction is a plasma membrane fraction.

4. (Original) The method of claim 1 wherein the serine residue is at a position corresponding to amino acid 473 of SEQ ID NO:1 and the threonine residue is at a position corresponding to amino acid 308 of SEQ ID NO:1.

5. (Currently amended) The method of claim 1 further comprising the step of combining PIP3 ("phosphatidylinositol 3,4,5-triphosphate") or PI(3,4)P2 ("phosphatidylinositol 3,4-biphosphate") with the membrane fraction, the cytoplasmic fraction and ATP in a buffer comprising less than 145 mM chloride.

6. (Original) The method of claim 5 further comprising the step of combining PIP3 with the membrane fraction, the cytoplasmic fraction and ATP in a buffer comprising less than 145 mM chloride.

7. (Original) The method of claim 1 wherein the insulin-responsive cell is a muscle cell, a liver cell, an adipocyte or an islet cell.

8. (Original) The method of claim 1 wherein the insulin-responsive cell is an adipocyte.

9. (Currently amended) An in vitro method of activating protein kinase B comprising

(a) obtaining from an insulin-responsive cell a plasma membrane fraction and a cytoplasmic fraction, which comprises a protein kinase B,

(b) treating said plasma membrane fraction with a solution comprising at least 145 mM chloride, thereby obtaining a salt-extracted plasma membrane fraction and an aqueous fraction,

(c) desalting the aqueous fraction thereby producing a desalted aqueous fraction comprising less than 145 mM chloride,

(d) preparing an assay mixture comprising ~~combining~~ the salt-extracted plasma membrane fraction, the cytoplasmic fraction, the desalted aqueous fraction, ATP, and a phosphatidylinositol phosphate molecule in a buffer comprising less than 145 mM chloride, wherein

(e) the protein kinase B is activated in the assay mixture by virtue of having a threonine residue phosphorylated and a serine residue phosphorylated, such that

(d) the activated protein kinase B is capable of phosphorylating a GSK3.

10. (Original) The method of claim 9 wherein the serine residue is at a position corresponding to amino acid 473 of SEQ ID NO:1 and the threonine residue is at a position corresponding to amino acid 308 of SEQ ID NO:1.

11. (Original) The method of claim 9 wherein the insulin-responsive cell is a muscle cell, a liver cell, an adipocyte or an islet cell.

12. (Original) The method of claim 9 wherein the insulin-responsive cell is an adipocyte.

13. (Original) The method of claim 9 wherein the insulin-responsive cell is treated with insulin.

14. (Original) The method of claim 9 wherein the phosphatidylinositol phosphate molecule is a PIP3 or PI(3,4)P2.

15. (Original) The method of claim 9 wherein the phosphatidylinositol phosphate molecule is a PIP3.

16-21. (Canceled).

22. (Original) The method of claim 1 further comprising the step of combining PIP3 or PI(3,4)P2 with the membrane fraction, the cytoplasmic fraction and ATP in a buffer comprising less than 145 mM chloride.

23-29. (Canceled).